

CLAIMS



1. A method for converting text to speech comprising:
receiving data representing a textual message, said message being directed from an author to a recipient;
receiving information identifying an individual;
retrieving a speech template comprising information representing characteristics of said individual's voice; and
converting said data representing said textual message to speech data, said speech data representing a spoken form of said textual message having the characteristics of said individual's voice.
2. The method according to claim 1 wherein said author interacts with a first computer and said recipient interacts with a second computer coupled to said first computer through a data network.
3. The method according to claim 2 wherein said speech template is provided at a central location coupled to said first computer and said second computer.
4. The method according to claim 3 further comprising receiving said data representing the textual message at said central location from said first computer.
5. The method according to claim 4 further comprising transmitting said speech data to said second computer from said central location.

6. The method according to claim 4 further comprising transmitting said speech data to said first computer from said central location.

7. The method according to claim 6 further comprising transmitting said speech data to said second computer from said first computer.

8. The method according to claim 3 further comprising receiving said data representing the textual message at said central location from said second computer.

9. The method according to claim 8 further comprising transmitting said speech data to said second computer from said central location.

10. The method according to claim 2 wherein said speech template is provided at said first computer.

11. The method according to claim 10 further comprising transmitting said speech data or said speech template to said second computer from said first computer.

12. The method according to claim 2 wherein said speech template is provided at said second computer.

13. The method according to claim 12 further comprising receiving said data

representing the textual message at said second computer from said first computer.

14. The method according to claim 2 wherein said first computer and said second computer are configured to communicate in an instant messaging format.

15. The method according to claim 2 wherein said first computer and said second computer are coupled to a server configured to operate chat room software, said data representing the textual message comprising text input to said chat room.

16. The method according to claim 15 wherein said server stores speech templates for users of said chat room.

17. The method according to claim 2 wherein said first computer and said second computer are coupled to a server adapted to store and provide access to a shared space object, said shared space object being associated with said textual message.

18. The method according to claim 1 wherein said author comprises computer executable program code designed to generate text in response to input from said recipient.

19. The method according to claim 18 wherein a computer executing said program code couples to a public switched telephone network.

20. The method according to claim 19 wherein said input from said recipient

comprises telephone key depression or speech.

21. The method according to claim 18 further comprising selecting said individual based on attributes of said recipient.

22. The method according to claim 21 wherein said attributes comprise age or gender.

23. The method according to claim 1 where said recipient interacts with a telephone coupled to a telephone network and said author interacts with a computer coupled to said telephone network through a data network.

24. The method according to claim 23 further comprising directing said speech data to said telephone network through said data network.

25. The method according to claim 23 further comprising transmitting a notification to said author when said recipient is unable to connect with a telephone of said author.

26. The method according to claim 25 further comprising receiving said data representing the textual message in response to said notification message.

27. The method according to claim 1 wherein said data representing the

textual message comprises a variable portion of a message having both a variable portion and a fixed portion.

28. The method according to claim 27 wherein said data representing the textual message further comprises said fixed portion.

29. The method according to claim 27 wherein said fixed portion is prerecorded speech of said individual.

30. The method according to claim 1 wherein said data representing the textual message comprises an e-mail message.

31. A text to speech conversion system comprising:

a memory that stores executable program code;

a processor that executes said program code;

a storage device that stores a speech template comprising information representing characteristics of said individual's voice, said individual being identified by identification data; and

wherein said program code is executable to convert text data to speech data, said text data representing a textual message that is directed from an author to a recipient, and said speech data representing a spoken form of said text data having the characteristics of said individual's voice.

32. The system according to claim 31 wherein said author interacts with a first computer and said recipient interacts with a second computer coupled to said first computer through a data network.

33. The system according to claim 32 further comprising a centralized computer that includes said processor wherein said centralized computer couples to said first computer and said second computer.

34. The system according to claim 33 wherein said centralized computer further comprises a communications port adapted to receive said text data from said first computer or said second computer.

35. The system according to claim 34 wherein said centralized computer is adapted to transmit said speech data to said first computer or said second computer.

36. The system according to claim 33 wherein said centralized computer is configured to operate chat room software.

37. The system according to claim 36 wherein said centralized computer stores speech templates for users of said chat room, said text data comprising text input to said chat room.

38. The system according to claim 33 wherein said centralized computer is

adapted to store and provide access to a shared space object, said shared space object being associated with said text data.

39. The system according to claim 32 wherein said first computer comprises said storage device.

40. The system according to claim 39 wherein said first computer further comprises a communications port that transmits said speech data or said speech template to said second computer.

41. The system according to claim 32 wherein said second computer comprises said storage device.

42. The system according to claim 41 wherein said second computer further comprises a communications port that receives said text data.

43. The system according to claim 32 wherein said first computer and said second computer are configured to communicate in an instant messaging format.

44. The system according to claim 31 wherein said author comprises voice-response program code designed to generate text in response to input from said recipient.

45. The system according to claim 44 wherein a computer comprising said

processor couples to a public switched telephone network.

46. The system according to claim 45 wherein said input from said recipient comprises telephone key depression or speech.

47. The system according to claim 44 further comprising selection program code that selects said individual based on attributes of said recipient.

48. The system according to claim 47 wherein said attributes comprise age or gender.

49. The system according to claim 31 where said recipient interacts with a telephone coupled to a telephone network and said author interacts with a computer coupled to said telephone network through a data network.

50. The system according to claim 49 further comprising directing said speech data to said telephone network through said data network.

51. The system according to claim 49 further comprising notification program code designed to transmit a notification to said author when said recipient is unable to connect with a telephone of said author.

52. The system according to claim 51 wherein said text data comprises a

textual message in response to said notification message.

53. The system according to claim 31 wherein said text data is a variable portion of a message having both a variable portion and a fixed portion.

54. The system according to claim 53 wherein said text data further comprises said fixed portion.

55. The system according to claim 53 wherein said fixed portion is prerecorded speech of said individual.

56. The system according to claim 31 wherein said text data comprises an e-mail message.

57. A text to speech conversion system comprising:

- means for receiving data representing a textual message, said message being directed from an author to a recipient;
- means for receiving information identifying an individual;
- means for retrieving a speech template comprising information representing characteristics of said individual's voice; and
- means for converting said data representing said textual message to speech data, said speech data representing a spoken form of said textual message having the characteristics of said individual's voice.

58. The system according to claim 57 wherein said author comprises computer executable program code designed to generate text in response to input from said recipient.

59. The system according to claim 58 further comprising means for receiving telephone key depression or speech from said recipient as input.

60. The system according to claim 58 further comprising means for selecting said individual based on attributes of said recipient.

61. The system according to claim 57 further comprising means for delivering said speech data to a telephone network wherein said recipient interacts with a telephone coupled to said telephone network.

62. The system according to claim 61 further comprising means for transmitting a notification to said author when said recipient is unable to connect with a telephone of said author.

63. The system according to claim 62 further comprising means for receiving said data representing the textual message in response to said notification message.

64. The system according to claim 57 wherein said data representing the textual message comprises a variable portion of a message having both a variable portion and a

fixed portion.

65. The system according to claim 64 wherein said data representing the textual message further comprises said fixed portion.

66. The system according to claim 64 wherein said fixed portion is prerecorded speech of said individual.

67. The system according to claim 57 wherein said data representing the textual message comprises an e-mail message.

68. An article of manufacture comprising:

a computer readable medium having computer usable program code embodied therein, said computer usable program code containing executable instructions that when executed, cause a computer to perform the steps of:

receiving data representing a textual message, said message being directed from an author to a recipient;

receiving information identifying an individual;

retrieving a speech template comprising information representing characteristics of said individual's voice; and

converting said data representing said textual message to speech data, said speech data representing a spoken form of said textual message having the characteristics of said individual's voice.

69. The article according to claim 68 wherein said author interacts with a first computer and said recipient interacts with a second computer coupled to said first computer through a data network.

70. The article according to claim 69 wherein said speech template is provided at a central location coupled to said first computer and said second computer.

71. The article according to claim 69 wherein said speech template is provided at said first computer.

72. The article according to claim 69 wherein said speech template is provided at said second computer.

73. The article according to claim 69 wherein said first computer and said second computer are configured to communicate in an instant messaging format.

74. The article according to claim 69 wherein said first computer and said second computer are coupled to a server configured to operate chat room software, said data representing the textual message comprising text input to said chat room.

75. The article according to claim 74 wherein said server stores speech templates for users of said chat room.

76. The article according to claim 69 wherein said first computer and said second computer are coupled to a server adapted to store and provide access to a shared space object, said shared space object being associated with said textual message.

77. The article according to claim 68 wherein said author comprises computer executable program code designed to generate text in response to input from said recipient.

78. The article according to claim 77 wherein a computer executing said program code couples to a public switched telephone network.

79. The article according to claim 78 wherein said input from said recipient comprises telephone key depression or speech.

80. The article according to claim 77 wherein said information identifying an individual includes age or gender attributes.

81. The article according to claim 68 where said recipient interacts with a telephone coupled to a telephone network and said author interacts with a computer coupled to said telephone network through a data network.

82. The article according to claim 68 wherein said data representing the textual message comprises a variable portion of a message having both a variable portion and a

fixed portion.

83. The article according to claim 82 wherein said data representing the textual message further comprises said fixed portion.

84. The article according to claim 82 wherein said fixed portion is prerecorded speech of said individual.

85. The article according to claim 68 wherein said data representing the textual message comprises an e-mail message.

86. A method for generating speech data for a voice response system comprising:

receiving input from a recipient;

generating a text message that provides a response to said input;

selecting a speech template comprising information representing characteristics of a voice based at least in part on attributes of said recipient; and

converting said text message to speech data, said speech data representing a spoken form of said textual message having the characteristics of said voice.

87. The method according to claim 86 wherein said input from said recipient comprises telephone key depression and speech.

88. The method according to claim 86 further comprising delivering said speech data to said recipient through a public switched telephone network.

89. The method according to claim 86 where said attributes comprise age or gender.

90. A method for converting chat room text to speech comprising:
storing a plurality of speech templates, each speech template comprising information representing characteristics of a chat room participant's voice;
receiving said chat room text from an author, said author being a chat room participant;
retrieving a speech template comprising information representing characteristics of said author's voice from said plurality of speech templates; and
converting said chat room text to speech data, said speech data representing a spoken form of said textual message having the characteristics of said author's voice.

91. A method for providing spoken electronic mail comprising:
receiving an electronic text message from an author of said message, said message addressed to a recipient;
retrieving a speech template comprising information representing characteristics of said author's voice;
converting said text message to speech data, said speech data representing a spoken form of said textual message having the characteristics of said author's voice; and

directing said speech data to said recipient.

92. The method according to claim 91 further comprising directing said speech data to said recipient over a public switched telephone network.

93. A method for providing speech output from a software application, comprising:

receiving text data from said software application;

receiving information identifying an individual;

retrieving a speech template comprising information representing characteristics of said individual's voice;

converting said text data to speech data, said speech data representing a spoken form of said text data having the characteristics of said individual's voice; and

supplying said speech data to an output device for output to a user as audio information.

94. The method according to claim 93 wherein the software application comprises an interactive learning program.